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ABSTRACT

Research has shown rape to be an act of violence which affects the lives of many individuals each year. For many survivors of rape, effects on psychological functioning and lifestyle may endure for many years. This study was undertaken to develop and pilot the Rape Assessment Schedule, an interview schedule designed to assess the very long-term effects of rape on psychological functioning and lifestyle. Interviews were conducted with 19 female survivors of rape with a mean post-assault interval of 7.72 years. The pilot data indicated that for at least some women, the effects of rape could endure for years. In general, these effects paralleled the short-term effects documented in the psychological literature and included the occurrence of nightmares and memories; changes in levels of fear, anxiety, anger, and depression; sexual dysfunction; and various life restrictions. The data also indicated that, in the majority of cases, these effects were cued by specific environmental stimuli. The findings support the contention that reactions to rape can be explained by two-factor learning theory, and are also congruent with the idea that reactions of at least some individuals to rape can be viewed as an example of the Post-Traumatic Stress Disorder. A reference list and tables outlining research results are attached. (NB)

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The Long-Term Effects of Rape on Lifestyle and Psychological Functioning

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Abstract

Twenty-four long-term survivors of rape participated in a project to develop and pilot an interview schedule designed to assess the very long term effects of rape on psychological functioning and lifestyle. The pilot data from 19 of these survivors (mean post-assault interval = 7.72 years) is reported herein. The data indicated, that for at least some women, the effects of rape can endure for years. In general, these effects paralleled the shorter-term effects documented in the psychological literature and included the occurrence of nightmares and memories, changes in levels of fear, anxiety, anger, and depression, sexual dysfunction, and various life restrictions. The data also indicated that, in the majority of cases these effects are cued by specific environmental stimuli. The nature of the effects are discussed in the context of two-factor learning theory and the Post Traumatic Stress Disorder.

Long-term Effects Of Rape on Psychological Functioning and Lifestyle

Based on current statistics (Uniform Crime Report, 1985), the FBI predicts that 25% of adult women and 11% of adult men will be raped during their lifetime. Koss's 1983 review of sexual victimization surveys reported on studies which indicated that between 13% and 22% of adult women report having been raped. In a random sample of 2004 adult women, 5% stated that they had been the victims of rape and 4% the victims of attempted rape (Kilpatrick, Veronen, & Best, 1985). Based on these data, Kilpatrick et al. estimated that 3,750,000 adult women in the United States have been raped and indicated that victimization statistics from other studies produce estimates as high as 16,500,000 victims for this figure. Despite the inconsistencies in estimates these studies indicate that rape is an act of violence which affects the lives of many individuals each year.

In response to these high rates of sexual victimization, a body of research has been generated which documents the effects of rape on psychological functioning and lifestyle. In a pioneering study, Burgess and Holmstrom (1974) interviewed 94 adult survivors immediately, and at various intervals up to one year post-assault. The authors coined the phrase, "Rape Trauma Syndrome", to describe the pattern of reactions to the rape and stated that this syndrome had two distinct phases. The first, or acute phase last for two to three weeks and is characterized by feelings of extreme fear, tension, humiliation, anger, self-blame, and embarrassment. The second phase is described as a reorganization of the survivor's lifestyle which may result in some relatively permanent changes. Changes noted by Burgess and Holmstrom included disturbing nightmares, the development of rape related phobias, and restriction in

lifestyle (i.e., the cessation of solitary activities, etc.). Furthermore, some of the women developed additional symptoms which included depression, psychotic behavior, psychosomatic disorders, suicidal behavior, increased drug use, and sexual dysfunction.

Numerous researchers have investigated survivors' reactions to rape during the first one to two years following the assault and have produced results which support the earlier work of Burgess and Holmstrom (Atkeson, Calhoun, Resick, & Ellis, 1982; Becker, Skinner, Abel, Howell, & Bruce, 1982; Brodsky, 1976; Calhoun, Atkeson, & Resick, 1982; Ellis, Atkeson, & Calhoun, 1981; Feldman-Summers, Gordon, and Meagher, 1979; Gilmartin-Zena, 1985; Kilpatrick, Veronen, & Resick, 1979; Kilpatrick, Resick, & Veronen, 1981). Collectively this research indicates that the survivors of rape experience an initial period of extreme disruption with very high levels of emotions such as fear, anxiety, and depression, problems with sleeping and eating and various sexual difficulties. Over the following months the initial acute reaction gradually declines with the survivors experiencing residual problems with fear, anxiety, depression, tension, fatigue, nightmares, sexuality, and social adjustment.

For many survivors of rape, effects on psychological functioning and lifestyle may endure for years. In a follow-up to their 1974, study Burgess and Holmstrom reported that 37% of their initial sample indicated that they had recoverd from the rape in months, 37% reported that the recovery had taken years, while 26% stated that they had not yet recovered (Burgess and Holmstrom, 1979a, 1979b). Many of these women continued to experience emotional and sexual difficulties. Other researchers have also indicated relatively long-term problems with depression, fear, and anxiety (Santiago, McCall-Perez, Gorcey, & Beigel,

1985; Williams & Holmes, 1981), social adjustment (Williams & Holmes, 1981), and sexual difficulties (Becker, Skinner, Abel, Axelrod, & Cichon, 1984).

Several researchers have indicated that an individual's reactions to rape can be best described as an example of a Post Traumatic Stress (PTS) reaction; if the reaction continues for longer than six months the individual can be said to have a Post Traumatic Stress disorder (Esper & Bristow, 1983; Esper, 1984, 1985; Burgess & Holmstrom, 1985; Kilpatrick, Veronen, & Best, 1985). Such reactions are common in people who experience serious, life threatening trauma. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM III, American Psychological Association, 1980) the PTS disorder includes three broad categories of reaction to trauma: 1) a reexperiencing of the trauma, generally in response to environmental cues; 2) a numbing of responsiveness or a reduced involvement with the external world; and 3) the presence of at least two of seven symptoms which include hyperalertness, exaggerated startle responses, sleep disturbances, guilt at having survived the event, memory impairment or difficulty concentrating, avoidance of activities that arouse a recollection of the event, and an intensification or triggering of these symptoms by exposure to events that symbolize or resemble the traumatic event. The above research on the effects of rape seems to indicate that virtually all rape survivors experience the PTS reaction and many of them experience the PTS disorder.

Kilpatrick (1983) and Becker et al. (1983) have also indicated that many behaviors seen in the survivors can be explained with two-factor learning theory. That is, any stimuli present at the time of the rape can become a conditioned stimulus and thus serve to trigger emotions such

as fear and anxiety that were present during the rape (factor one). Therefore, the survivor develops certain behaviors that serve to avoid rape-related cues or eliminate these cues from the daily environment (factor two), mitigating some of the long-term effects of the trauma.

The purpose of the present paper is to report on part of the pilot data which was collected during the development of a schedule designed to assess the long-term effects of rape on psychological functioning and lifestyle (Esper, 1984). The purpose of the latter project was both to develop the assessment schedule and to investigate the nature of effects experienced by long-term survivors of rape. Long-term was defined as three or more years post-assault and participants were asked to report on the nature of any emotional or cognitive changes, to describe how these changes were manifested in their daily lives, whether they felt these effects were general in nature or triggered by specific environmental cues, and, if specific, to describe the salient cues.

Method

Participants

Participants were recruited in one of three fashions: 1) Through the use of feature stories in local newspapers which reported on the research, 2) presentations made by the researcher to local womens' groups and classes at Kansas State University, and 3) flyers posted in various locations (e.g., laundromats) in the area. The pilot sample consisted of 24 caucasian women although data from only 19 of these women was in a form which could be used in the current paper. The mean age at the time of the interview was 27.5; the mean age at the time of the assault was 20.1. Sixty-three percent of the sample had rural and 37% had urban backgrounds. Seventy-seven percent of the sample had been raped by a single assailant and 23% had been raped by multiple assailants. Fifty

percent of the sample had been raped by strangers and 50% by acquaintances. The mean post-assault interval was 7.72 years (range = 3-34 years); the mean interval excluding the extreme interval of 34 years was 6.17 years (range = 3-14 years).

Materials

As indicated, this data was collected during the development of a schedule designed to assess the long-term effects of rape (Rape Assessment Schedule, RAS). The RAS was developed in three stages. Data taken at each stage was used to refine and/or add to the items in the schedule, and to determine codeable response categories for each question. At the end of this process data from all participants was coded onto the third form of the RAS.

Procedure

All interviews were conducted by the author or by one of three female interviewers. All interviewers received training in crisis intervention counseling from professionals associated with the local shelter for the victims of domestic violence and rape. The interviewer read each question to the participant and took detailed notes of her responses; when applicable, the participant indicated responses on likert scales. In addition, each interview was audio taped. Crisis counseling was provided as needed during the interview and referrals were made for longer-term counseling. The interviews were untimed and took an average of two and one-half hours to complete. At the end of the interview all participants stated that they felt more positive than upon their arrival and indicated that they felt participation in the study was theraputic.

Analysis

Data Coding and Interjudge Agreement

As mentioned, data from all 19 respondents was coded onto the third

form of the RAS. Some items had remained constant over all forms of the RAS and data coding was relatively straightforward. Other items were added at later stages of development. For some of these latter items, the necessary information had been given in other sections of the earlier form of the RAS and was extrapolated by the judges. In regard to the remainder of these items, the necessary information had not been given and the data was coded as missing. All items were coded independently by at least two trained judges which resulted in two complete data sets.

Inter-judge agreement was then calculated on a subset of 45 items from the RAS which involved the most judgement/extrapolation on the part of the coders. The number of times coders agreed across response categories was divided by the total number of possible agreements for each item. Across all items, inter-judge agreement was .83; within items, agreement ranged from .52 to 1.00. One of the two data sets generated by the judges was then used for subsequent interpretation and discussion.

Results and Discussion

Of the nineteen survivors who responded to the RAS, all reported some enduring changes in emotional functioning and lifestyle. While this data was qualitative in nature and based on a very small sample, the results supported the shorter-term effects documented in other studies that have used more objective measures. These included the occurrence of nightmares and memories, changes in levels of various emotions, sexual dysfunction, and lifestyle restrictions.

The survivors indicated a general tendency to show increases in levels of fear, anxiety, anger, and depression (see Table 1, items 3a, 4a, 5a, & 6a). One hundred percent of the women indicated an increase in fear, 76% an increase in anxiety, 66% an increase in anger, and 33% an

increase in depression. This is congruent with findings of other researchers (e.g., Becker et al., 1982; Calhoun et al., 1982; Kilpatrick et al., 1979, & 1981). In response to all of the emotions except depression, the majority of the women indicated that the emotion was triggered by specific environmental conditions rather than being general in nature (see Table 1, items 3c, 4c, & 5c). The data indicated that the cues which served to trigger fear and anxiety were remarkably similar while those associated with anger showed a unique pattern (see Table 1, items 3b, 4b, & 5b). With respect to anxiety and fear, cues most frequently denoted were either directly rape related (i.e., cues specific to the woman's rape) or can be conceptualized as rape related (i.e., feelings of vulnerability, being alone, etc.). The majority of the cues mentioned as eliciting anger seemed to reflect ways in which women are degraded or victimized by society (e.g., sexual violence, male arrogance, battering). Only six of these women indicated an increase in depression; of these, 50% felt depression was general in nature and 50% indicated that it was specific. Only one of these women mentioned the rape or rape related changes in her life as a causal factor for her depression (see Table 1, item 6b)

In addition, the majority of the women indicated at least the occasional occurrence of nightmares and intrusive memories (see Table 1, items 1a & 2a). This is congruent with the work of Burgess and Holmstrom (1974). In general, the environmental elements which triggered fear, anxiety, and anger also resulted in the occurrence of nightmares and memories (see Table 1, 1b & 2b). The data also showed a pronounced change in the tendency to notice environmental cues to vulnerability to victimization. This resulted in fairly frequent feelings of vulnerability in many of these women (see Table 1, items 7a, 7b, & 7c).

In general, the women indicated that when any of the effects described above were activated, mild to moderate disruption of their daily lives was experienced (see Table 2, items 1a, 2a, 3a, 4a, 5a, & 6a). These disruptions included various physiological symptoms, irritability, problems with concentration, and some decrease in the ability to function adequately (see Table 2, items 1b, 2b, 4b, 5b, & 5c). However, many of these women made instrumental responses in order to avoid or control disruptions in their lives. For example 58% of the women responded to fear with hyperalertness and preparation for attack which reduced the fear level. In response to feelings of vulnerability, 85% of the women made responses which involved other people (i.e. call friend) and 72% made responses which involved objects (i.e.,obtained a weapon) to reduce these feelings.

In addition, all but two of the women reported changes in living arrangements, such as the need to have roommates, the purchase of a dog, and taking various safety precautions (see Table 3, item 1). Moreover, 90% of the sample indicated changes subsumed under living style such as the tendency to carry a weapon, learn self-defense, and the cessation of solitary activities (see Table 3, item 2). The women also showed a tendency to restrict employability by avoiding jobs where safety was considered inadequate or positions which would bring them in contact with elements that would trigger adverse reactions (see Table 3, item 3).

Furthermore, all of these women made changes in the way in which they related to other individuals. These relational style changes reflected a tendency to become less friendly with and more distant from men in general while becoming more friendly with and closer to women in general (see Table 3, item 6). These data are consistent with Brodsky (1976) and Williams and Holmes (1981) which reported that some rape

survivors had difficulty relating to men. Moreover, 62% of the sample indicated that they altered their appearance or interpersonal strategies following the rape to discourage men from approaching (see Table 3, item 7), and 33% indicated that they were much more selective about the men that they dated (see Table 3, item 5). Finally, 63% of the sample indicated some long-term sexual difficulties (see Table 3, item 4). This is congruent with Becker et al. (1984) who indicated that 60% of their sample reported long-term sexual problems.

The results of this pilot investigation support Kilpatrick's (1983) and Becker et al.'s (1983) contention that reactions to rape can be explained by two-factor learning theory. The majority of the women indicated that the long-term effects of their rape were triggered by specific environmental cues; cues which through the process of classical conditioning (factor one) and stimulus generalization become associated with feelings present during the rape. According to the process of operant conditioning (factor two) the survivor would then be expected to develop behaviors to avoid or escape these stimuli and/or strategies to discriminate stimuli in the daily environment from assault related conditioned stimuli. This is supported by the development of various restrictions and changes in living and relational style seen in the current sample. All of these behaviors would result in an avoidance of conditioned stimuli (i.e. never being alone avoids CS being alone) or serve to discriminate the daily environment from the assault situation (i.e. a locked environment vs CS of an unlocked environment).

In addition, the results of the current project are congruent with the idea that reactions of at least some individuals to rape can be viewed as an example of the PTS disorder (Burgess et al., 1985; Esper et al., 1983, Esper, 1984, 1986; Kilpatrick et al., 1986). Indeed, all of

the women in this sample would be diagnosed as having this disorder according to the criterion of the DSM III. The first criterion or category of response for this disorder is a reexperiencing of the trauma. Factors considered a reexperiencing of the trauma included intrusive recollections of the event, dreams of the event, and a sudden acting or feeling that the event were reoccurring because of association with environmental cues. The cued nature of the psychological effects reported herein support this criterion. The second criterion, a numbing of responsiveness or reduced involvement with the external world can be seen in the tendency of these women to increase the distance between themselves and men, restrict their employability, and stop solitary activities. The third criterion, the presence of two of seven symptoms (hyperalertness, startle response, sleep disturbances, guilt, memory impairment or difficulty concentrating, avoidance of activities that arouse a recollection of the event, and intensification of these symptoms in response to cues), was also supported by this data. Guilt at having survived, or about behaviors needed to survive, while not readily apparent from the table, can be illustrated with the use of anecdotal evidence from the present study. Many women reported guilt over the nature of their avoidance strategies. For example several of them stated that their increased dependence on friends for company, a dependence necessary for the avoidance or alleviation of fear (e.g., survival), made them feel "stupid" or like "a burden".

While the above data is retrospective and based on a very limited sample, the fact that it parallels the findings of other researchers who have used larger samples and objective measures of effects offers support for its' validity. It is apparent from this study that, for at least some women, the effects of rape may produce relatively permanent changes

in lifestyle and on psychological functioning. The changes in behavior which result from a rape may seem "neurotic" to those who associate with the survivor, but when considering past experience, many of these behaviors can be conceptualized as avoidance strategies used to alleviate or avoid the effects of victimization.

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Table 1

Emotional Reactions/Cueing

1a. Occurrence of nightmares (n = 19)
.78 yes
.15 no
.07 had at one time but no longer

Frequency of occurrence
.00 often, at least once a week
.68 several times a month
.00 once a month
.33 several times a year
.00 seldom, no more then once a year
.27 rarely, but occasionally
.00 never
.33 it varies

b. What cues nightmares
.53 general rape cues
.26 unsure
.26 feelings of vulnerability
.20 cues specific to woman's rape
.13 battering, sexual violence

2a. Occurrence of memories (n = 19)
Frequency of occurrence
.26 often, at least once a week
.05 several times a month
.05 once a month
.05 several times a year
.00 seldom, no more than once a year
.44 rarely, but occasionally
.00 never
.36 it varies

b. What cues memories
.63 cues specific to the woman's rape
.57 restimulation of memory of any event occurring around time of assault
.57 rape and sexual violence
.46 idiosyncratic response (i.e. the smell of alcohol)
.36 feelings of vulnerability
.16 unsure

3a. Anger (n = 19)
.89 have experienced a change in level
.11 have not experienced a change in level

(table continues)

Degree of change rated on a 7-point scale; 1 = much less & 7 = much more anger
M = 6.3
range = 2-7

b. What cues anger (n = 19)
.47 rape, sexual violence
.47 male dominance and arrogance
.47 physical abuse of women by men
.41 specific, idiosyncratic responses (i.e. pornography)
.35 lack of respect of women by men
.29 male ignorance
.29 women who refuse to take rape seriously
.17 verbal abuse of women by men
.17 woman putting themselves in dangerous positions
.10 lack of compassion for rape victims, bystander apathy

c. Is the emotion specific or general in nature (n = 19)
.88 specific
.06 general
.06 both, at different times

4a. Anxiety (n = 17)
.82 have experienced a change in the emotion
.18 have not experienced a change in the emotion

Degree of change rated on a 7-point scale; 1 = much less & 7 = much more anxiety
M = 5.5
range = 3-7

b. What cues anxiety (n = 12)
.58 being alone
.42 cues specific to woman's rape
.42 general rape cues
.42 feelings of vulnerability
.33 other specific, idiosyncratic responses (i.e. cat calls)
.16 unsure

c. Is emotion specific or general in nature (n = 12)
.67 specific
.25 general
.08 both at different times

5a. Fear (n = 17)
1.00 have experienced a change if the emotion
.00 have not experienced a change in the emotion

(table continues)

Degree of change rated on a 7-point scale; 1 = much less & 7 = much more fear
M = 6.65
range = 4-7

b. What cues fear (n = 16)
1.00 dark, being alone, and strangers
.43 cues specific to woman's rape
.43 feelings of vulnerability
.19 general rape cues
.13 exsistence of rape myths
.13 other specific, idiosyncratic responses (i.e. rapist return)

c. Is the emotion specific or general in nature (n = 17)
.65 specific
.18 general
.18 both at different times

6a. Depression (n = 18)
.61 have experienced a change in the emotion
.39 have not experienced a change in the emotion

Degree of change rated on a 7-point scale; 1 = much less & 7 = much more depression
M = 4.3
range = 1-7

b. What cues depression (n = 6)
.33 general state of the world
.33 feelings of hopelessness
.33 other specific, idiosyncratic response (i.e. legal system)
.16 over changes in life produced by rape

c. Is the emotion specific or general in nature (n = 6)
.50 specific
.50 general
.00 both at different times

7. Vulnerability (n = 11)

a. What makes you feel vulnerable
.68 when not in control of the situation
.42 situation were an assualt likely
.37 being alone
.32 other specific, idiosyncratic response (i.e. when ever feel emotionally close with others)
.21 strange (unknown) men
.26 when physically unable to protect self
.05 new situations

(table continues)

b. How often feel vulnerable (n = 11)

.10 all of the time
.18 several times a day
.27 often/fairly often
.18 several times a month
.18 seldom/rarely
.10 varies

c. Change in tendency to notice vulnerability cues (n = 19)

Rated on a 7-point scale; 1 = no change & 7 = large increase
M = 5.98
range = 4-7

Note. The above are paraphrases of items and response categories from the RAS. Values Preceeding categories represent the proportion of women who indicated that response; sample size is indicated for each item.

Table 2

Effects on Functioning

1. Nightmares

a. Degree of disruption (n = 14)
- .00 not at all disruptive
- .57 mildly disruptive (causes tension, unpleasant feelings)
- .21 moderately disruptive (causes difficulty on the job, lack of concentration, etc)
- .07 severely disruptive (miss work, stay home, etc.)
- .14 degree of disruption varies as a function of the dream

b. Nature of the disruption (n = 14)
- .53 specific, idiosyncratic responses (i.e. flashbacks)
- .33 withdrawn
- .20 inability to concentrate
- .13 numbness, no emotion
- .13 jumpy, tense and irritable
- .13 inability to function
- .06 tired, lethargy

2. Memories

a. Degree of disruption (n = 17)
- .18 not at all disruptive
- .54 mildly disruptive (causes tension, unpleasant feelings)
- .18 moderately disruptive (causes difficulty on the job, lack of concentration etc.)
- .00 severely disruptive
- .05 degree of disruption varies as a function of the situation

b. Nature of disruption (n = 17)
- .31 inability to concentrate
- .26 extreme fear
- .21 specific, idiosyncratic responses (i.e. startles)
- .16 withdrawn
- .15 physiological symptoms
- .10 numb, no emotions
- .10 inability to function adequately
- .05 totally non-functional

(table continues)

3. Anger

a. Degree of disruption (n = 15)

Rated on 7 = point scale; 1 = not at all & 7 = extremely disruptive
M = 4.33
range = 1-7

b. How anger is expressed (n = 17)
.41 no overt response, tight and tense
.35 rage, tantrums
.35 other specific, idiosyncratic responses (i.e. it varies, etc.)
.29 shake, cry
.29 verbally address source of anger
.17 feel heavily burdened by anger
.12 attempt to be very rational
.06 self-abuse

c. Nature of disruptions (n = 14)
.50 upsets family
.50 can't be alone
.25 anger inappropriate in some situation, causes trouble (i.e. at boss, etc.)
.25 become physically ill

4. Anxiety

a. Degree of disruption (n = 12)

Rated on 7 = point scale; 1 = not at all & 7 = extremely disruptive
M = 4.03
range = 1-7

b. Nature of disruption (n = 12)
.45 difficulty being alone
.33 specific, idiosyncratic responses (i.e. causes problems with friends, etc.
.23 avoids or is uncomfortable in new situations
.23 jumpy, nervous or tense
.12 difficulty concentrating
.12 totally non-functional

5. Fear

a. Degree of disruption (n = 19)

Rated on 7-point scale; 1 = not at all & 7 = extremely disruptive
M = 5.1
range = 1-7

(table continues)

b. How fear is expressed (n = 19)
- .58 instrumental response to reduce fear (i.e. call friend, hyperalertness, preparation for attack, etc.)
- .47 physiological, autonomic responses (i.e. heart pounding, etc.)
- .41 hyper cautious
- .35 freezes, panic
- .29 cry, hysterics
- .29 other specific, idiosyncratic responses (i.e. trys to accept and control fear, etc.)
- .06 difficulty functioning
- .06 trys to act very tough
- .06 totally non-functional

c. Nature of disruptions (n = 19)
- .58 restricts activities, life
- .33 other specific, idiosyncratic responses (i.e. makes do rash things, etc.)
- .17 upsets family
- .17 difficulty functioning adequately
- .08 withdrawn
- .08 jumpy, irritable
- .08 yells, argumentative

6. Depression

a. Degree of disruption (n = 6)

Rated on 7-point scale; 1 = not at all & 7 = extremely disruptive
M = 4.14
range = 1-7

b. Nature of disruption (n = 6)
- .75 specific, idiosyncratic responses (i.e. argumentative, loneliness etc.)
- .25 difficulty functioning adequately
- .25 difficulty concentrating
- .25 low energy, lethargy
- .25 easily frustrated

Note. The above are paraphrases of items and response categories from the final form of the RAS. Values preceeding categories represent the proportion of women who indicated that response; sample size is indicated for each item.

Table 3

Life Restrictions and Changes in Relational Style

1. Changes in living arrangements (n = 19)
   - .68 various safety pecautions (i.e. locks, bars on windows etc.)
   - .47 the need to have roommates
   - .42 other (booby traps, phones in all rooms etc.)
   - .37 need to know neighbors
   - .31 need to have dog
   - .31 second story access to living quarters
   - .10 no changes

2. Changes in style of living (n = 10)
   - .80 no longer walk alone at night
   - .60 began to carry a weapon
   - .60 no longer engage in activities alone
   - .60 other specific, idiosyncratic responses (i.e. openly confronts men who are following or acting suspicious, etc.)
   - .50 no longer drive alone at night
   - .40 learned self-defense
   - .10 no longer drive alone during the day

3. Job restrictions, jobs might have taken prior to the assault but will no longer consider (n=19)
   - .53 any job at night
   - .47 any job where safety precautions are a potential concern (i.e. working alone or in a rough neighborhood)
   - .24 any job which was reminiscent of the assualt (i.e. doing social work now if female social worker who had been assaulted while on a case)
   - .19 any job which required a high degree of contact with men (i.e. at a truck stop or as a barber)
   - .06 any job in which a man or men had power over survivor (i.e. as a secretary for male employer)

4. Sexual problems (n = 19)
   - .73 have had some problems since the assault
   - .15 have had no problems
   - .11 not applicable
   - .63 still experiences problems

5. Relational style (n = 12)
   - .33 much more selective about men
   - .27 increased distance to men
   - .22 other specific, idiosyncratic responses (i.e. can not trust etc.)
   - .16 have to control sexual encounters, initiate acts etc.
   - .16 changed or facilitated change of sexual preference

(table continues)

6. Changes in interpersonal responses to women and to men, in general, since the assault. (n = 19)

women	men	
.00	.15	don't date women (men) any more
.00	.21	date women (men) only if know well
.10	.21	not as open with women (men)
.15	.10	lost some female (male) friends due to assault
.15	.00	closer to women (men) then used to be
.57	.10	form stronger bonds with women (men)
.47	.00	trust women (men) more
.78	.00	empathize more with women (men)
.31	.00	have more female (male) friends
.05	.36	do not make new female (male) friends as easily
.05	.84	uncomfortable with women (men) don't know well
.05	.31	uncomfortable with women (men) in general
.10	.89	more suspicious of women (men)
.10	.78	avoids women (men) that don't know well
.57	.05	avoids being alone with women (men) don't know well
.00	.57	won't talk to women (men) don't know well
.00	.21	difficulty working with women (men)
.05	.58	feels threatened by women (men) with power over her
.00	.00	no change in interpersonal response

7. Changes made to discourage men from approaching (N = 19)
   - .68 made changes
   - .32 did not make changes

   Nature of changes
   - .62 altered physi \l appearance (i.e. gained weight, stopped dressing up etc.)
   - .62 changed interpersonal strategies (i.e. acted less friendly etc.)

Note. The above are paraphrases of items and response categories from the final form of the RAS. Values preceeding categories represent the proportion of women who indicated that response; sample size is indicated for each item.